

M



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,098	09/09/2003	Chih-Wei Chang	MSCP0005USA	2097

27765 7590 12/14/2004

(NAIPC) NORTH AMERICA INTERNATIONAL PATENT OFFICE
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

BLOUIN, MARK S

ART UNIT	PAPER NUMBER
----------	--------------

2653

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/605,098</p>	<p>Applicant(s)</p> <p align="center">CHANG, CHIH-WEI</p>	
	<p>Examiner</p> <p align="center">Mark Blouin</p>	<p>Art Unit</p> <p align="center">2653</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Detailed Action

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsai (USPN 5,982,735).
3. Regarding Claim 1, Tsai shows (Fig. 2 and 3) an optical disk drive for reading/writing data on an optical disk, the optical disk drive comprising a mounting plate (10), a guide bar (40), and a pickup head (20) guided by the guide bar and moveable along a lengthwise direction of the guide bar, the pickup head reading/writing data on the optical disk by an optical means, the optical disk drive comprising a fixing structure (Figure 4) for positioning the guide bar on the mounting plate, the fixing structure comprising a fixed joint (56) and a flexible pressure-providing joint (55), the fixed joint rigidly fixing one end of the guide bar (40) to the mounting plate, the flexible pressure-providing joint positioning another end of the guide bar (60) on the mounting plate, and the two ends of the guide bar fixed in their relative positions due to a flatness of the mounting plate and despite a positioning action of the fixing structure such that linear movement of the pickup head is guided by the guide bar.
4. Regarding Claim 2, Tsai shows (Fig. 2 and 3) the optical disk drive pressure-providing joint includes a stop block (53) and an elastic member (52), wherein the flexible elastic member positioned on the mounting plate, the corresponding end of the guide bar (40) is positioned

Art Unit: 2653

between the stop block and the elastic member and is flexibly retained between the stop block and the elastic member by the elastic force generated when the flexible pressure-providing joint is in contact with the stop block.

5. Regarding Claim 5, Tsai shows (Fig. 2 and 3) the optical disk drive of has a supporting part (50) positioned wherein the fixed joint on the mounting plate and a fastening apparatus (54) screwed to the mounting plate so that the corresponding end of the guide bar (40) is positioned between the supporting part (50) and the fastening apparatus (54), and the fastening apparatus holds the guide bar against the supporting part to closely position the guide bar between the supporting part and the fastening apparatus.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3,4, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai (USPN 5,982,735) in view of Handa (USPN 6,633,532).

8. Regarding Claims 3,4, and 6-8, Tsai shows (Figs. 2 and 3) all the features described, supra, including a base (12) fixed on the mounting plate (10), a spindle motor (11) positioned on the base for driving the rotation of the optical disk, but does not show and a plurality of pitch adjusting apparatuses installed at different positions between the base and the spindle motor, each pitch adjusting apparatus comprising a spring having two sides adjacent to the base and the spindle motor to separate the base and the spindle motor, and a screw connecting the base and

the spindle motor to limit separation of the base and the spindle motor, wherein a plane in which the optical disk driven by the spindle motor is located is adjusted by changing relative distances between the spindle motor and the base at different positions to balance the springs and the corresponding screws, wherein the elastic member of the flexible pressure-providing joint is connected to one of the springs of the pitch adjusting apparatus.

To et al shows (Figs. 1 and 2) a plurality of pitch adjusting apparatuses (40a,40b) installed at different positions between the base (30) and the spindle motor (2), each pitch adjusting apparatus comprising a spring (50) having two sides adjacent to the base and the spindle motor to separate the base and the spindle motor, and a screw (43) connecting the base and the spindle motor to limit separation of the base and the spindle motor, wherein a plane in which the optical disk driven by the spindle motor is located is adjusted by changing relative distances between the spindle motor and the base at different positions to balance the springs and the corresponding screws, wherein the elastic member (end of spring 50) of the flexible pressure-providing joint is connected to one of the springs of the pitch adjusting apparatus.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the adjustment mechanism of Tsai with the tilt adjusting apparatus of Handa. The rationale is as follows: One of ordinary skill in the art at the time the invention was made would have been motivated to substitute the adjustment mechanism of Tsai with the tilt adjusting apparatus of Handa in order to insure proper angle of incidence of the laser beam, thus avoiding reading errors.


Art Unit: 2653

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is (703) 305-5629. The examiner can normally be reached M-F, 6:00 am – 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, William Korzuch can be reached at (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314 for regular and After Final communications.

Any inquiry of general nature or relating to the status of application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Mark Blouin
Patent Examiner
Art Unit 2653
December 7, 2004

A. J. HEINZ
PRIMARY EXAMINER
GROUP ~~2800~~ A.U. 2653

